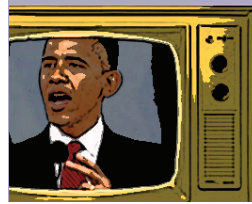


ORE THE DIGGER NEWSPAPER

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Obama at CSM

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TECHBREAK | The New iPod Nano

"If you've seen the ads, I have to say yes, it's that thin." **-Page 4**

GEEK OF THE WEEK

"Nanotechnology will be the most important scientific advancement of the 21st century." **-PAGE 5**



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• Ra Ra Riot, Brian "Head" Welch, Krystal Meyers

Barack Obama at Mines

Historic event targeted campaign volunteers, focused on economic woes, new energy economy

Tim Weilert
Content Manager

On September 13, when it was announced that Democratic presidential candidate Barack Obama would be visiting the Colorado School of Mines (CSM), the response was mixed. The media arrived in droves as thousands of Jefferson County residents and Mines students waited in line. The Secret Service descended upon campus, traffic became hectic, and several Mines students took to protesting the event.

Protesters came from a variety of backgrounds, but found common ground in their disapproval of Obama's visit. Their signs featured slogans such as "Lower Gas Prices! Drill Off Shore," and "Say No To

Socialism."

Andrew Bosela, a CSM freshman, had this to say: "I agree with Sen. Obama that we as Americans need to phase off our use of petroleum and gas to renewable and alternative energy sources. However, making those alternatives economically viable will obviously take time, and therefore I hold to the view, along with many others, that we need to drill for some of our own oil in the interim as we research other options, a view, to the best of my knowledge, definitely not held by Sen. Obama."

But why did the Obama campaign choose CSM? The answer: Colorado is a swing state, and Jefferson County is a key district. This fact was also realized by Republican vice presidential candidate

Sarah Palin, who spoke at the JeffCo Fairgrounds on September 15. As students attending Obama's event found out, this was not a speech targeted toward engineers. Instead the event focused its energy toward energizing Obama's grassroots movement here in Jefferson County.

Jacob Smith, the mayor of Golden, gave the first formal speech. His focus was on the School of Mines, NREL and renewable energies. "Here at the School of Mines they are training the next generation of engineers who will drive the new energy economy," said Smith, "It is time for a president who understands the new energy economy and understands that we can create jobs here at home while reducing our dangerous dependence on foreign oil."

SEE "OBAMA" PAGE 3



PATRICK BESEDA / OREDIGGER

Big Hit for a Small Town. Last Tuesday, Democratic Presidential nominee Barack Obama spoke to students and community members at CSM's Lockridge Arena. To see the full speech, visit *The Oredigger's* website at www.oredigger.net.

CERN launches \$8 billion particle collider

Patrick Beseda
Staff Writer

At the center of attention for physics researchers all over the world, the European Organization for Nuclear Research (CERN) has made headlines over the past two weeks.

CERN's largest on-site project, the Large Hadron Collider (LHC), was unveiled earlier this month. With a circumference of 17 miles, straddling the border between France and Switzerland, the LHC is the world's largest, highest energy particle accelerator.

According to Colorado School of Mines (CSM) physics professor Dr. Lincoln Carr, who worked at CERN for several years, "It's the largest experiment in the history of the human race." With a total cost of more than \$8 billion and a staff of over 7,000 scientists from 28 countries collaborating on the project, the new supercollider stands in the eyes of many as a monument in human achievement.

In the coming weeks, the LHC will reach temperature levels that have not been seen since the Big Bang. The process begins when the particle accelerator smashes together two beams of protons at very high speeds.

The purpose of the LHC is to find undocumented particles and further evidence that can validate the Standard Model, a theory used by physicists to describe the forces of nature that affect all matter in the universe. By validating the Standard Model, "we could transform our entire

picture of reality," said Carr.

Renowned theoretical physicist Stephen Hawking said, during an interview with BBC, "I think it will be much more exciting if we don't find the Higgs. That will show something is wrong, and we need to think again." The LHC's results will undoubtedly tell researchers and theorists a tremendous amount about the structure of the universe.

CSM boasts the 4th highest ranked physics research department in the country; professors, students and researchers await the results of the experiments in Switzerland.

"It's out of physics that much of the technology is developed," said Carr. Indeed many medical technologies, renewable energy advancements and even the early beginnings of the Internet came out of physics research and CERN; these are all areas of research that CSM is currently involved in.

Currently, researchers in CSM's Physics department are engaged in over \$2 million of externally funded research annually, with research strengths in nuclear physics, ultra-fast optics, and condensed matter physics.

"They are doing a lot of research in solid-state physics and have made a lot of progress with solar cells and renewable energies," said CSM undergraduate Nick Saylor.

Despite the prospect of scientific advancement, much of the world remains speculative about the dangers of the LHC. "All the talk about black holes - it's garbage. Not even worth discussing," said Carr.

State regulations weigh on professors' free speech, alienate few on campus

Alec Westerman
Staff Writer

"As the election season approaches, I want to take this opportunity to remind you that state law prohibits you, as a state employee, from campaigning for candidates or ballot issues on state time or using state resources," said Colorado School of Mines (CSM) President Scoggins, in an all-staff email on August 28, 2008.

The law that Scoggins referenced, according to Ann Walker of CSM's Legal Services Office, was the "Colorado Fair Campaign Practices Act (FCPA), Section 1-45-117, Colorado Revised Statutes."

"The purpose of the FCPA is to prohibit state government and its officials from using public funds and resources to influence

the outcome of a political campaign or a ballot issue," said Walker.

Dr. Chester Van Tyne of the Metallurgical and Materials Engineering department indicated that he had encountered no inconveniences thus far and was not bothered one way or another. "My role is to prod students to make rational decisions," said Van Tyne. He added that these decisions are the students' own and that they ought to develop stances of reason rather than those of their friends, parents or professors.



ALEC WESTERMAN / OREDIGGER



No worries. Professors Eberhart and Van Tyne do not feel the FCPA regulations will have a significant impact on their classrooms this fall.

Given the standing of FCPA, Van Tyne inquired as to how Democratic presidential nominee Barack Obama's visit to CSM was possible, though he was glad the opportunity was made available. Van Tyne also questioned whether "my rights to freedom of speech stop at CSM." Although he hopes to question students for critical thinking in the future, Van Tyne wonders whether the FCPA could potentially hinder his ability to do so.

"I think it's ok. I think it's appropriate," said Dr. Mark Eberhart of the Chemistry and Geochemistry department, adding that the FCPA regulations have not been an obstacle thus far. If an issue were a blatant question of morality against immorality, Eberhart expects that professors would speak out regardless of consequences. Professors should mention, according to Eberhart, that such stances are theirs alone and do not represent the university.

"This thing is long for something that simple," said one CSM student, who wished to remain anonymous. "Don't you think this is a matter of freedom of speech?" he asked.

"I guess I agree with them not being able to use school money for their use," said CSM student Justin Tappan, who expressed distaste for the idea of limiting professors' freedom of expression.

"I think it would be stimulating for students in the classrooms studying history to see how history ties into contemporary politics," said Tappan.

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Scientific discoveries this week

Abdullah Ahmed, Asst. Business Manager

Pittsburgh, USA: Researchers at the University of Pittsburgh are developing a unique method to clean up oil spills in water. The process begins with injecting the polluting oil with ferrofluid (nanoparticles of liquid iron). Then, using a super magnet, the oil could be collected easily. This new method requires great amounts of ferrofluid, which is very expensive. The scientists are currently looking for ways to recycle and reuse the ferrofluid more than once.

Ohio, USA: Using a 250,000 frames-per-second video camera, scientists at the University of Ohio have filmed the first-ever video of fungi shooting microscopic spores into the air. The four types of fungi studied are able to launch their spores at speeds exceed over 1000 times the speed of a fly's takeoff. Now the research is focusing on indoor mold to examine the spores they release that cause serious allergies.

Switzerland: A team from the University of Bern has discovered the gene responsible for baldness in hairless dogs. The study finds that the gene, code-named FOX13, had emerged as a mutation about 4000 years ago. The same gene sequence is found in humans and mice. The study also stated that an earlier discovery of FOX13 in humans was not possible since the genome sequence that scientists used as a standard contained an error that prevented deciphering the gene.

Australia: Approximately 100 new species have been discovered in Australian waters. The list includes mostly new sharks and rays. Though these species have been mentioned in the past in a book, scientists have not studied them until now. Methods of conserving and protecting these rare water animals are being developed.

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Headlines from around the world

Emily Trudell, Staff Writer

Bill Gates remained listed as the **richest** man in America when **Forbes magazine** named its 400 richest Americans. Numbers on **Wall Street** took a dive early last week as a number of large banks went bankrupt. The economic situation continued to fluctuate throughout the week. **Kwame Kilpatrick**, the former mayor of Detroit, stepped down from his position after admitting to lying in court; Kilpatrick will also be going to jail for the charges. Officials at **NASA** said that the October 10th launch date for a shuttle flight to the **Hubble Space Telescope** will most likely be delayed due to a problem with the replacement batteries for the telescope. Hackers broke into the private Yahoo email account of Republican Vice Presidential candidate **Sarah Palin**, revealing personal emails she had received from Presidential candidate **John McCain**. Also last week, Palin spoke at the Jefferson County Fairgrounds. The **Anti-Doping Agency** began retesting blood samples from this year's **Tour de France** in an attempt to catch more competitors who may have used the blood booster EPO or similar banned drugs. A new study found that a new method of **X-ray colonoscopy** is effective at finding cancers, and healthcare providers have begun to consider this new form of less-invasive cancer screening. Democratic Presidential candidate **Barack Obama** stated that, as president, he would work with

United States **military officials** to withdraw the "don't ask, don't tell" policy towards homosexuality. **Lockridge Arena** was packed to capacity when Obama gave a speech at Mines where he outlined his economic plans. **Jefferson County** is being projected as an important swing county in Colorado, which has become a swing state for the upcoming election. Though United States supermarkets currently do not sell **genetically altered animal meats**, the Food and Drug Administration stated that it will begin to consider allowing their sale. Thousands of **Chinese babies** continued to suffer from kidney stones and kidney failure due to the chemical melamine, which was found in **Sanlu** baby formula; parents of the children confronted the company for refunds. A page of **Mozart's** notes was

found in a French Library outlining the draft of a musical composition. After six full weeks of competitions in China, the Olympic Games concluded in Beijing after the closing ceremony for the **Paralympic Games**. Hundreds of **new species of marine life** were discovered in the coral reefs off the coasts of Australia after a series of expeditions conducted by the Census of Marine Life. At least 16 people were killed when terrorists attacked the United States Embassy in Yemen, including **Susan Elbaneh**, an 18-year-old

woman from upstate New York. The **World Health Organization** revised its estimate for the number of people infected with **malaria** each year from 500 million to 247 million. Near Geneva, Switzerland, the cooling system responsible for keeping the **Large Hadron Collider** at near zero Kelvin temperatures malfunctioned only one day after the collider was launched. **Tomoji Tanabe**, the world's oldest man, celebrated his **113th birthday** this week in his home in Miyakonojo, Japan, and stated that he would like to live five more years.



Smart semiconductors

Robby Gill
Staff Writer

Semiconductors function to control electronics in a binary fashion, by having an 'on' position and 'off' position. According to Dr. Craig Taylor in a presentation last Tuesday, semiconductors are now feasible for memory applications.

Significant advances have been made recently in semiconductor research. They can be used ten million to a trillion times before failing, and their speed "is now on the scale of tens of nanoseconds," said Dr. Taylor.

Dr. Taylor focused his presentation on types of Germanium-Antimony-Tellurium (GeSbTe). The material is commonly found in rewritable DVDs (DVD-RWs). GeSbTe is useful because "optical disks work on the basis of reflectivity," said Dr. Taylor.

The first step in understanding this phenomenon is to study the structure of GeSbTe. "The structure, until recently, was relatively unknown," said Dr. Taylor.

GeSbTe is stable in both a crystalline structure and an amorphous

structure. Each structure has a different reflectivity, allowing it to be used in optical disks. "These materials are dominated by the covalent nature of the bonding," said Dr. Taylor. By using Nuclear Magnetic Resonance scanning, Dr. Taylor showed that as the number of Te atoms increase, the number of folding Te-Te bonds tends to decrease.

Dr. Taylor discussed the limits of his data. The experiments could only be conducted in a maximum 17.5 Tesla field, so data extending to 30 Teslas had to be estimated. "We'll have to go back and do it right," said Dr. Taylor.

It is still unclear what the specific switching mechanism is for GeSbTe. According to Dr. Taylor, this is the "holy grail" for this field of research.

NASA and the U.S. Air Force have a significant interest in semiconductors. Dr. Taylor pointed out that semiconductors could be used to "program around failing computers using electricity." In other words, a change in voltage from a short circuit would cause a semiconductor to signal for electricity to be shot down another circuit.

Division of Economics and Business Seminar: "Measuring Supercycles in Minor Metals"

Greg Davies
Staff Writer

Although periodic price fluctuations have long been a topic of interest for economists, one Colorado School of Mines student recently unveiled a study on the impact of multiple-decade economic cycles in minor metals.

This issue was addressed by Daniel Jarrett's recent paper, "Measuring Supercycles in Minor Metals." Jarrett, a fourth-year Ph.D. candidate at the Colorado School of Mines said, "This whole idea of studying long cycles really hasn't gotten a lot of attention."

According to Jarrett's lecture, the fundamental problem with studies of supercycles is one of definition.

"Advocates and critics have failed to define [supercycles]," said Jarrett.

Jarrett defined a "supercycle" as an economic pattern lasting anywhere from 20 to 70 years. Another obstacle in supercycle research was the possibility that "long cycles may be a statistical artifact," where economists may see fictitious cycles as the result of inappropriate data interpretation.

According to Jarrett, practical applications of the research are especially pertinent to mining companies. Mining is an industry with "high risk and long gestation periods," said Jarrett. As a result, predictions about the market, in the short term, generally have limited usefulness.

By the time the mining operation is up and running, explained Jarrett, the short-term cycle may have ended and large amounts of capital may have already been invested. Since supercycles reach farther, their predictions would be more likely to generate successful long-term results.

The research was furthered by unique qualities in the trade of minor metals. The first of these, Jarrett explained, is that they "do not trade on a formal exchange." This fact made data collection more difficult than standardized commodities. In addition, the trade of minor metals has a "different market structure" than most goods. For example, China's monopoly over tungsten resulted in a dramatic global price spike when a natural disaster struck the country.

The theory of supercycles experienced a recent resurgence in popularity, when Citigroup's Alan Heap claimed that "a supercycle is underway, driven by material intensive economic growth in China." Heap believes that supercycles have occurred twice in the past 150 years, both during periods of economic growth. According to Heap, the first occurred from the late 1800s to early 1900s and the second occurred in the mid-1900s from post-war reconstruction and economic expansion in Europe and Japan.

Jarrett's studies show strong correlations between minor metal prices and supercycles, specifically after the 1950s. "Our paper is really the first paper to try to measure something like this," said Jarrett.

According to Jarrett, this research is one of the first to quantifiably measure supercycles and could be a strong basis for future research.

Obama speaks to roaring crowd in Golden

CONTINUED FROM PAGE 1

Up next was Denver Mayor John Hickenlooper, a self-identified political outsider and business-minded leader. "As most of you know, I'm not such a great politician," said Hickenlooper, "I'm someone who believes in good government. When I ran [for mayor] five years ago, I was someone on the outside who wanted to change government to work for everybody." Hickenlooper shared anecdotes about Obama and talked about the issues of change and what effects an Obama presidency would have on Colorado residents.

Following Hickenlooper was Colorado Governor Bill Ritter. "In January 2007, we said, in Colorado, we're going to be a leader in the new energy economy," said Ritter, "We're going to create jobs in renewable energy across Colorado just by saying 'We can.'" The Governor discussed various renewable energy projects, such as the foundation of the world's largest wind tower manufacturing company in Pueblo. Ritter stressed the importance of renewable energy and its effect on security and the economy. He ended by encouraging Colorado voters to vote for Obama, focusing on the fact that Colorado is a swing state.

Several other speeches took place before Senator Obama finally made his appearance. Remarks from Erin Ramsey, an Obama Field-Organizer for Jefferson County, again stressed the importance of Colorado in the November election. She urged Obama supporters to volunteer for the candidate, a theme which ran throughout the event. Fredrico Peña, a former mayor of Denver, Secretary of Energy and Transportation under the Clinton Administration, spoke "to keep things warm" during the wait.

As the crowd sat in waiting, their anticipation intensified with chants of "O-Ba-Ma!" The cheers grew as Peggy Roach, a Lakewood woman, took the stage to share her story before introducing Obama. As she finished, Lockridge Arena

literally shook with cheering, and, when Obama finally emerged from behind the curtains, the cheering intensified.

Obama's speech, titled "Confronting An Economic Crisis," began with his remarks about the current economic woes facing America. "In the last few days," said Obama, "We have seen clearly what's at stake in this election. The news from Wall Street has shaken the American people's faith in our economy." He proceeded to describe specific instances of recent economic crises, and attack Senator John McCain's economic philosophy. "This isn't 9/11," said Obama, "We know how we got into this mess, what we need now is leadership that gets us out. I'll provide it, John McCain won't, and that's the choice for Americans in this election."

The specifics of Obama's economic plan included job creation, retooling of bankruptcy law, economic framework and regulation. "To jumpstart job creation, I have proposed a \$50 billion emergency economic plan that would save one million jobs by rebuilding our infrastructure, repairing our schools, and helping our states and localities avoid damaging budget cuts." Obama spoke against lobbyists, promised to cut taxes for working Americans, affordable healthcare, and offered "change, as more than a slogan."

Energy was also a hot topic. "We'll tap our natural gas reserves, invest in clean coal technology, and find ways to safely harness nuclear power," said Obama. "I'll help our auto companies re-tool, so that the fuel-efficient cars of the future are built right here in America. I'll make it easier for the American people to afford these new cars. And I'll invest \$150 billion over the next

decade in affordable, renewable sources of energy wind power and solar power and the next generation of biofuels, an investment that will lead to new industries and five million new jobs that pay well and can't ever be outsourced."

Senator Obama ended his speech by echoing the themes that had been talked about all morning. As he closed his speech with an encouragement for his volunteers, he said, "I ask you to knock on some doors, and make some calls, and talk to your neighbors, and give me your vote on November 4th. And if you do, I promise you we will win Colorado, we will win this election, and we will change America together."

In an email sent to students CSM President Miles "Bill" Scoggins recognized the positive implications of hosting a presidential candidate. "I am proud we were selected as the venue for this event, as it reflects our growing recognition as a leading, world-class research university," said Scoggins. "I am also proud that we were contacted by Senator McCain's campaign staff earlier this summer. Although they chose another location for their event at that time, we welcome further inquiries from them about renting a facility at Mines. We should all be proud that our campus is a place where national policies are discussed."



Would you like to know more about Obama's visit or departmental lectures? Visit www.oredigger.net to watch video-feeds, view slideshows and comment on articles!

STUDENTS

YOUR STUDENT BODY PRESIDENT, KEVIN DUFFY, INVITES YOU TO THE SECOND ASCSM MEETING OF THE YEAR.

The next ASCSM meeting is September 25th at 7 PM in Student Center Ballrooms A and B.

We want to hear from you! Come speak up at your next student government meeting.

\$25 gift card raffled for the audience at each meeting.

Reel Rock Tour comes to Mines

Ben Makuh
Staff Writer

"There's no answer to why we're up there." Considering some of the utterly death-defying maneuvers shown in the Reel Rock Film Tour last Friday night, that is quite an accurate statement.

Over 100 people showed up to the ORC-hosted event held in Coolbaugh 209, and after a rough start trying to get the equipment to work, participants enjoyed over two hours of rock-climbing-related films. Well, perhaps enjoyed is the wrong word. "When watching that movie, I was like a Pavlov's dog. My hands were leaking sweat!" said Cameron Frisby, an ORC employee.

One of the most prominent features of the films was the phenomenal natural beauty. One film was shot as a group went down the Grand Canyon and made many first ascents; another was about Rock Lands, South Africa.

"The Rock Lands have more bouldering opportunities than anywhere I've seen in the world," said one climber. One of the final



"When watching that movie, I was like a Pavlov's dog. My hands were leaking sweat!"

ascents they achieved there was a V14/15, an almost-impossible climb up a finger-slicing rock face. "Bouldering is less about the summit, and more about the individual moves, the flow," said another climber.

In the second half of the night, *The Sharp Edge* was shown, showcasing the most fantastic and ridiculous challenges that rock climbers have met to date.

The challenges grew exponentially more crazy throughout the film, ranging from guys using "sketchy old equipment to push traditional boundaries," to Germans climbing granite towers with no chalk or tools, to the most incredible spectacle of all - base soloing. It seems almost conservative to call that pushing the boundaries, because the climber goes up without anything except a parachute in case of a fall. "It's all about pushing yourself to the most challenging situation," said the climber.

This is the second year the ORC has hosted the event at Mines, and the third year of the film tour. For more information and a teaser, visit reelrocktour.com.



iPod Nano released last week

Ian Littman, Tech Break Columnist

You may have heard by now that Apple has introduced new iPods into the world, including a very cool-looking iPod nano. Gone are the portly proportions of the third-gen nano, but the rather large screen is there, plus you can shake the iPod to shuffle.

I was actually able to get my hands on a new nano (the blue, 8GB version) last Monday, courtesy the Mines bookstore, which sells the various iPods. So here's my take on Apple's newest pint-sized media player.

First off, the iPod works as advertised. I am not sure about battery life, but based on rough estimation it should be close to advertised (24 hours of music, 4 hours of video). As with all Apple products, the user interface is just great.

Since the screen is now vertically mounted, the UI is changed somewhat so that what was on the right side of the screen on the previous nano is now at the bottom of the new nano's display. I actually like the nano's implementation of the iPod system better.

Speaking of the screen, video quality is excellent. Colors are good and the 320x240 screen (videos are played with the iPod on its side) gives a sharp picture. Audio

quality is also good, with the included ear buds, though you might want to shell out for some more expensive units if you want more bass response or voice recording functionality (Apple sells some ear buds that fit the bill).

A big, new, gimmicky feature of the iPod is the Genius feature. I have to say, it works very oddly. Then again, I didn't put too many songs on the nano, and the feature relies on community knowledge that is still being gathered.

Considering that as of this

ing the music player a joy to hold and use.

The casing colors (red, blue, green, purple, orange, yellow, silver and black "nano-chromatic" aluminum) are simply striking, especially on the colored models. The iPod nano still doesn't have ancillary features common to non-Apple media players, like a FM radio or a built-in microphone, and four hours isn't exactly the embodiment of excellent video-watching battery life, but those are literally the only nits you can pick with the iPod.

Everything else is pretty much perfect. Thin, light, good-looking and functional, the iPod nano is a winner for anyone wanting to take a few thousand songs or a few hours of video with them.

The nano is available at Apple stores, Apple's online store and, unless you want the red version, at Mines' own bookstore, for \$149 or \$199, depending on whether you want the model with 8GB or 16GB of storage. This is actually quite inexpensive considering what you're getting - sheer Apple amazingness.

Of course, if you want something bigger and better, I'll be reviewing the new iPod touch next week.

A big, new, gimmicky feature of the iPod is the Genius feature. I have to say, it works very oddly.

writing the feature is less than two weeks old, and that the songs that I have in my iTunes library are mostly not from the iTunes store, Genius tried hard. Something that works better: shake-to-shuffle. Get a new and random song in two shakes, literally. No menus needed, plus it's a fun party trick.

About the design: if you've seen the ads, I have to say *yes, it's that thin*. The thickness, or rather lack thereof, is accentuated by an oval structure new to the nano, mak-

Get on the bus, Gus | What to do with your RTD bus pass

Akira Rattenbury
Staff Writer

Want to save money on gas, meet new people and cut down on pollution? Ride the bus!

After a small fee increase approved by the Associated Students of the Colorado School of Mines (ASCSM) last spring, students at the Colorado School of Mines (CSM) once again have access to the entire Regional Transportation District's (RTD) light rail and bus system across the metro area. Just flash your pass at the driver, sit down, and enjoy the ride.

Golden bus service relies on four regular routes and two regional routes. The 16, 16L, 17, and 44L can be picked up in downtown Golden and ridden into surrounding areas. The GS and AF regional routes service Golden to Boulder and Lakewood to DIA. If you want to party in Boulder, you can take the GS on Friday from Golden at 6:34 PM, go wild all weekend in Boulder, and return to classes on Monday, as early as 6:15 AM.

Trying to navigate Golden? If you live near Golden Ridge, South Golden Road, or Colfax, the 16, 16L, and 17 have regular times to get you to and from class without fighting for that coveted

CTLM space you arrive an hour early to get. You can even ride your bike to a bus stop and take it on the bus. This allows you to snooze that extra 5 minutes after you stayed up all night "studying."

Also, rather than struggling to drive through the snow this winter, take a ride and finish your homework on the warm buses.

Want to get out of the wild and exciting world of Golden? RTD is a fun and safe ride downtown to a Rockies game, nightclubs and everything else Denver has to offer. Especially convenient if you have been drinking, simply jump on the 16 or 16L and you can get downtown, without switching buses,, in under an hour. Instead

of looking for and paying for expensive parking, you can relax on the bus, enjoy the company of your friends and have a safe ride home without drinking and driving.

Looking to get to the airport? Paying \$5 to \$18 a day to park your car at DIA may seem convenient, but taking the skyRide is free with your pass and routes leave around the clock. The Cold Springs Park n' Ride is a quick 10 minute drive from the heart of Golden, and its well-lit parking lot includes

security cameras so you don't have to worry about thugs stealing your car's radio.

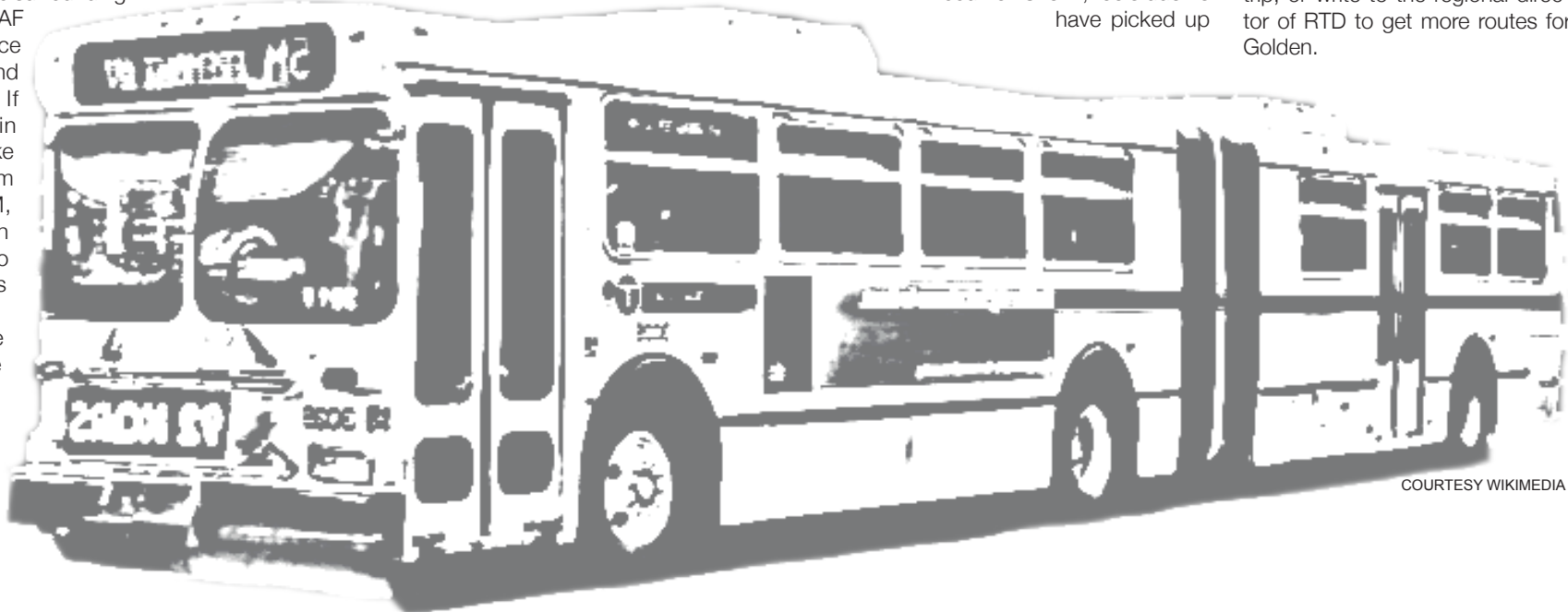
If you would rather leave from Golden, start with the buses from downtown Golden to get to the airport in about an hour and a half. Normally \$22 round trip, the skyRide is a safe, clean way to get to the airport for a fraction of DIA's parking fees.

Bus passes can still be picked up at the Student Activities Office in the Student Center. Route schedules are available on the office counter. Over 2,200 students have picked up

their passes already. While you continue to pay a parking fee for a parking garage you will likely never use, you can use your bus pass immediately.

ASCSM President Kevin Duffy, chairman of the new Transportation subcommittee, is looking for input and suggestions for alternatives to the bus pass using the Intermodal Transportation Fee. If you would like to learn more about ASCSM's efforts, come to the next ASCSM meeting, on Thursday, September 25 in the Student Center Ballrooms. Plans to renew a Golden circulator bus within the city and other ideas will be considered.

Use www.rtd-denver.com to access route information, plan a trip, or write to the regional director of RTD to get more routes for Golden.



COURTESY WIKIMEDIA

Geek of the Week

...Deviyani Rao, Freshman: Chemistry

Emma Janisch
Staff Writer

[Oredigger] Do you consider yourself a geek?

[Rao] Not necessarily a geek, but I do consider myself a big nerd if there is a difference between the two.

Tell me something about yourself that only your close friends know.

I adore playing video games and I love to read fantasy novels all the time. Only my very close friends know that and accept that of me.

Do you have any nicknames?

Well my full name is Deviyani so Devi is as nick-namish as it gets.

What activities are you involved in?

I am into karate - that's really fun and I am a black belt. I think that's pretty much it.

What made you choose Mines?

I chose Mines because I want to go with science as a career, and I figured that Mines would give me the best base for science.

What is the geekiest thing you've seen at Mines?

Geekiest thing [laughs]. I saw some kids playing Magic on a Friday night; that was pretty intense.

Tell me about nanotechnology and what makes it so interesting.

Well, nanotechnology will be the most important scientific advancement of the 21st century. It will help with environmental problems - making everything green - it will help in

the medical field, and it will help in the consumer field. They already have stain-proof paints, and they get the stain-proof part from nanotechnology. [Nanotechnology] will pretty much improve every part of our lives.

If you were left on a deserted island, what two essentials would you want there?

Of course I would have to have a book, and I would have to have my teddy bear with me.

What's your favorite book and movie?

I don't know if I have a favorite book, but my favorite author, by far, is Isaac Asimov, who was a big time geek who was into science fiction stuff. There was a short story he did called *The Last Answer*, which was amazing. And my all time favorite movie has got to be Moulin Rouge - very good movie.

If you could be any fantasy character from your books who would it be and why?

There was a series written when I was younger by Tamora Pierce and she was very much into the strong female power, you know, 'go girl' sort of attitude. One of her characters, Daine, was girly but still able to kick some ass, so I liked her a lot.

What is your favorite joke?

Okay, one of my friends gave this to me a while ago: 'a

man walks into a bar and says ouch.' It's really lame but that's the entire joke. It takes people a while to get it because they are expecting more.

Who are you going to vote for in the next election and why?

Barack Obama. I hope that he can help with the problems that have surfaced over the last couple of years and help get the U.S. back to where it was a while ago.

Do you believe everyone is a geek at heart?

Yeah pretty much, it's just those who are geeks admit it to themselves and to others. So yeah there is a geek in everyone of us, at least just a little bit.



EMMA JANISCH/OREDIGGER

Nanoscience Ninja. Devi has a license to study

Accessing Mines from anywhere

Steve Wittstruck
Academic Computing and Networking

Have you ever been away from campus but found yourself needing an important file residing back on the department server? Or maybe you couldn't wait until the next project meeting to show colleagues a computerized model you've been working on? Now with a new service from CSM's Academic Computing and Networking department, it's not only possible to access Mines computer resources from anywhere in the world, it's easy.

Virtual Private Networks, or VPN's, have been around for a while, but until now they required expert IT staff installation one computer at a time. And even so, inflexibility left a lot to be desired. That was then.

This is now. CSM's AC&N department is rolling out new Virtual Private Network support that significantly improves the user experience while adding many new and exciting features, like an easy-to-use web interface, support for 64-bit operating systems, and a feature called Secure Meeting which allows users to collaborate online. AC&N expects a big jump in VPN use once the CSM community understands the power and flexibility of the new

VPN service.

Based on Secure Socket Layer (SSL) technology which is built into every standard web browser, the new VPN will enable secure CSM network access from any web-enabled device anywhere in the world, whether it's a desktop computer, a laptop, or a PDA. Unlike the previous VPN offered on campus, there is no software to download, install, configure, or maintain by the user.

To get started with this exciting new VPN, simply point any web browser to <https://secure.mines.edu> (note the "https" rather than "http").

The new VPN will enable secure CSM network access from any web-enabled device anywhere in the world

Secure Meeting

Perhaps the most intriguing new feature of the new VPN is Secure Meeting, which allows VPN users to collaborate online, sharing their applications, and even their desktops, with one another over a secure connection. To set up a Secure Meeting, log into the VPN and select the Meeting icon near the upper right. To join a meeting in progress, log into <https://meeting.mines.edu>.

This description just touches the surface of what the new VPN offers users. For more information on this exciting new system, log into the VPN and click the "Help" icon in the upper-right corner.

A passion for chemistry

Spencer Nelson
Staff Writer

Walking through Coolbaugh Hall, it is hard not to notice the posters on the wall detailing research done in the Chemistry department. The range of topics is eclectic, everything from identifying bacteria on toilet seats to advances in mass spectroscopy have been covered. These posters have few things in common. However, a common feature of some of them is Dr. Voorhees.

Dr. Kent Voorhees received his BS, MS, and PhD from Utah State University in Organic Chemistry almost 40 years ago and has been researching and teaching ever since.

Since coming to Mines 29 years ago, Voorhees has taught multiple classes, including Organic Chemistry and Mass Spectrometry. He says his favorite class to teach is Organic Qualitative Lab because "there's an awful lot of lab time so that you interact with the students extensively and you get to know them as people."

Dr. Voorhees's love for chemistry is evident. He says, "It's a great career. Everything is based on chemistry." As one of the twelve members on the current Board of Directors for the American Chemical Society, Voorhees says the best thing about his

career is that "there [have] been very, very few days that [I have] really hesitated about coming to work and having second thoughts [such as], 'Boy, I wish I didn't have to go to work.'"

Dr. Voorhees does a wide variety of research, but recently his main focus has been on biodetection. His research has produced a mass spectroscopy procedure that is able to detect the bacterium causing anthrax, plague, tularemia, and Glanders. Now his goal is to develop detectors without the need for mass spectroscopy. "We're kind of moving out of mass

spectrometry a little bit because mass spectrometers cost a couple hundred thousand dollars. If you're building these for use in a battlefield situation, you don't want a soldier leaving behind a \$200,000 piece of equipment." For this research, he thinks, "Mines is the place to be."

Dr. Voorhees had a few words of advice for students wondering about their careers. He suggested that students consider the alternative fuels field. "We're hurting as far as an energy policy in this country," said Voorhees, who believes that alternative fuels are the energy solution for the future.

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Trailhead services line up

Ginny Lee
Academic Computing and Networking

If you're a student who has registered for a class or paid a tuition bill; if, as a Colorado School of Mines (CSM) employee, you've looked up your latest pay stub or counted vacation days; if after a hard day you need a quick link to the "Daily Show," you might have done all that and more through the CSM website called Trailhead.

Trailhead is a web gateway or "portal" that provides easy one-log-in access to a bunch of CSM computer services. Trailhead's primary goal is to provide access to individuals' campus records, but over the years it has evolved into a customizable site, able to include news, educational and, yes, even entertainment.

When the Mines community logs into the Trailhead website members have a wealth of information instantly available. For instance, one can view campus news or personal announcements; update personal contact information on the campus information directory (log into Trailhead and click Self Service > Personal Information); access various campus systems through Trailhead with single-sign-on (SSO) applications; review new publication listings through the Library "New Acquisitions" RSS feed channels (Instructions for adding channels to your Trailhead tabs are in the "Trailhead News" channel); and access information and tools relevant to one's "role" as a Mines student, faculty member, or staff person.

For instance, students may register for classes, access grades, access and print transcripts, view and pay school bills, and review and accept financial aid awards.

Faculty can view course rosters, enter grades, review advisees' records, and get email addresses to send messages to your students.

All employees are able to access and print pay stubs, review benefits, deductions and tax information, and enter or review attendance and leave information.

Obviously, that's a lot of data to be synthesized and made available on one website. In fact, the information above spans at least four different database systems, plus Trailhead itself. Some of the different administrative offices that are involved in managing and maintaining the data and systems include Admissions, Graduate Studies, Financial Aid, the Registrar's office, Human Resources, Information Services and the various Finance and Administration offices. Academic Computing and Networking, in cooperation with these offices, maintains Trailhead and manages Trailhead user accounts and access.

Once a user has logged into Trailhead, the following services will be available to various individuals (depending on the person's campus role) with no further need to log in: Self-Service Banner (registration, transcripts, bills, access pay stubs, vacation days, and so on), CSM Webmail, Exchange Email (for administrative offices), and the CSM Portal Calendar. Here, users can manage or view

a personal or group calendar. Select the "Portal Calendar" icon to get started.

Also available are CSM Groups, DiggerNet (career planning), Environment Health and Safety, Chemical Search, Vacation/Sick Leave Reporting, Campus financial records, e-Print Financial Reporting, Discoverer Viewer (a reporting tool).

Admittedly, there are still computer systems on campus not yet connected to Trailhead, such as Blackboard, LON-CAPA and the Library system. For those systems, users still need to remember individual passwords and sign on separately. Academic Computing and Networking is working to provide single-sign-on access to these and other campus services.

Many improvements are in the works. Here's what the campus community will find when an upgraded version of Trailhead makes its appearance in 2009: improved and extended services from Banner, more single-sign-on services amalgamated within Trailhead, improved communication options for the campus community, campus-specific information in the form of bulletins, general information, and RSS feeds, and more and better external content from outside news and service providers.

From time to time, people have complained that this or that feature of Trailhead doesn't work perfectly. But, from another perspective, it's pretty amazing how well Trailhead works to integrate all these disparate systems, from different parts of the campus, into a one-stop web portal.

Movie Reviews

Stargate : The Ark of Truth

Michael Rose
Staff Writer

The long-awaited ending to the popular television series *Stargate SG-1* has come, ironically, in the form of a straight-to-DVD movie; it brings a close to the series plotline and the invasion of the Ori into the Milky Way galaxy.

This movie will certainly be a success for the fans, but those watching this movie without previous *Stargate* knowledge will be lost and confused. That said, it makes for an excellent conclusion to the epic, two-year saga of the Ori Arc. Fortunately, the DVD includes a 9-minute long prelude which recaps and explains the previous two seasons of *SG-1*

for those not current on the television series.

The introduction opens with a vague explanation of the purpose of the Ark of Truth, a device to show the truth of the Ori, their status as false gods and the Alteran's choice to never use the device on the Ori. Fast forward many thousands of years later and the SG-1 team is attempting to find the Ark as a weapon against the Ori incursion.

The SG-1 team takes an expedition into the "Ori Galaxy" to find the device for use on the followers of the Ori – fanatical believers of a religion called Origin. These followers are taking over the Milky Way galaxy to gain more followers and purge the unworthy. In true *Stargate* tradition, an expedition can

never "not go wrong." An operative from an oversight committee puts a parallel plan into action, one which attempts to prevent the launch of additional Ori spaceships that ends in disaster.

The film is a satisfying and exciting ending to an otherwise unfinished series. I'm sure I speak for all *Stargate* fans when I say that the series could have continued for many more seasons. The increased budget for the sets and CGI did not fail to please; the special effects were incredible and placed the movie above any other episode before it, even season finales. "The Ark of Truth" is a worthy ending to a great series and I would recommend it to any *Stargate* fans.

The Women

Erin Stephens
Staff Writer

A remake of George Cukor's 1939 classic, *The Women* embodies the inclination of women to meddle in each other's lives.

From director Diane English, the film features an all-female cast that meshes together with the perfect blend of intrigue and trivial pursuits.

The plot begins with a curious twist, revealed by the gossiping mouth of a Sak's 5th Avenue manicurist to Sylvia Fowler (Annette Benning). The husband of Sylvia's friend is having an affair with a lower-class perfume girl, a typical side effect of a high-society marriage. Sylvia, an uptight, conniving city woman, immediately circulates the rumor among her circle, including Mary Haines (Meg Ryan), the wife of the cheating husband.

When Mary learns of her husband's infidelity, she is faced with

the choice of following her mother's (Candice Bergen) tested advice or succumbing to the confrontational advice of her friends. After encountering the perfume girl (Eva Mendez) in a La Perla lingerie store, Mary demands a divorce.

The plot deepens with the pregnancy of another of Mary and Sylvia's friends, Edie Cohen (Debra Messing) and the lesbian tendency of another, Alex Fisher (Jada Pinkett-Smith).

The rest of the plot is divided between the rising career of the newly-liberated Mary Haines and the failing career of Sylvia. In the film, the fashionable woman represents success, while the plain country-woman symbolizes "frumpiness." The transition of the women from one category to the next creates the human-interest side of the film.

Using the nail polish color Jungle Red as a way to distinguish the passive housewives from the aggressive masterminds, the film depicts each woman as a frivolous,

yet emotionally disconnected, character. The stereotypical vanity placed on women in the upper class is the unfortunate goal of the women here.

The mother-daughter relationships in the film are laced with the effects of schemes passed from one generation to the next. The three generations of women in Mary's family are the result of high-society breeding. The problems between Mary and her daughter are the same as any mother and daughter, allowing all females to relate to the characters.

The filming techniques Diane English employs separate the movie from the typical chick-flick, by making a world inhabited by only women. Even though the men are missing from the screenplay, the women's world is still centered about them. *The Women* is a typical assessment of the interactions between a circle of friends and a home wrecker who comes between them.

Lakefront IPA smooth, sweet

Akira Rattenbury
Staff Writer

Best enjoyed in a large glass, Lakefront Brewery's IPA can be savored equally well in the bottle. Brewed in Milwaukee, Wisconsin, this English-style India Pale Ale is on the lighter side of the hoppy spectrum.

The beer pours a smooth— not watery— copper color, deeper in hue than a typical IPA. It leaves a fairly creamy two-finger head and a faint metallic, piney aroma hinting

at the forgiving hops stored inside. Where I expected a burst of bitterness to cleanse the pallet, this IPA came up short with a wisp of malt and some hoppy sweetness. This is a great pick if you are not interested in puckering up after taking a sip.

The sweet aftertaste and lack of tart make this IPA an excellent foray into the hop-ridden market of craft brews. The strong carbonation cleanses the more viscous leftover flavors from the mouth. This would

be great when imbibed with hot wings, while watching some Monday night football.

Overall, Lakefront is an uninspired IPA with little added flavor, except for a slight, sweet caramel and perhaps a hint of citrus if you huff it by the pint. The lack of bite or a goodbye kiss of hops left me wanting my \$10 back. However, this would make a great introduction for the hops-hater among your friends.

★★★

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- *Living the Rockies with Elliot*
- *Green Thoughts with Natalie*
- *Health and Fitness with Ben*

www.oredigger.net



For Homework - See Transformers (2)

Live concert turns

Tim Weilert
Content Manager

Two weeks ago we ran a music review about an up-and-coming music act from Syracuse, New York, named Ra Ra Riot. Coincidentally, Ra Ra Riot happened to be playing in Denver this last week. Their new album *The Rhumb Line*, recently released on Barsuk Records, has received excellent reviews from the likes of Rolling Stone and Spin Magazine and has potential to make this band the next big thing.

The Hi-Dive, a self-proclaimed "Indie Rock Bar," is a cozy venue buried in the heart of southern Denver. What the venue lacked in size, it made up for in sound. Not only was the show well mixed, but also comfortably loud.

The first opening act, Pepi Ginsberg, was smooth and original. Her

songs told stories about a variety of topics, including tides and escaped convicts. Inventive lyrics, coupled with Ginsberg's distinct voice, made for an enjoyable opener.

Following Ginsberg was the experimental-electro-pop group Walter Meego. Armed with a plethora of vintage synthesizers, effects pedals, and drum machines, Walter Meego got the entire venue moving and dancing. They played with intensity and did not stop between songs.

Finally it was time for the headliner: Ra Ra Riot. Somehow the entire six-member band fit on the small stage and did not injure each other during the course of the night. As soon as their set started, they jumped right in to some of their



Must See Movies: Friendly Robots

n M. Weilert, Staff Writer

Robots are notorious for having little or no emotion, outside of Hollywood, that is. Given the right motivation, most robots can be friendly, emotional and comedic. The following three movies exhibit some robots with similar traits, both in design and amiability.

1. WALL-E (2008)

This most recent computer-generated masterpiece from Pixar shows us that you don't need dialogue to convey a wide range of emotions. As usual, *WALL-E* exhibits Pixar's incredible talent for blending a good storyline with mind-blowing visual effects. With the Earth completely trashed, WALL-E is the only robot left to clean up after us. While he's working, all of humanity is up in the "Buy 'N' Large" space cruiser (essentially one huge jab at Wal-Mart). A probe from the spaceship named EVE is sent down to Earth to see whether or not it is habitable again. Hilarity ensues as WALL-E becomes stricken with EVE and chases her back to the spaceship, which leads up to a heartwarming ending back on Earth. I have no doubt that *WALL-E* will be nominated for best animated picture this year, with a high possibility that it will win the Oscar.

2. Short Circuit (1986)

In our media-saturated society, catch phrases and jingles are all too common. However, when a military robot starts learning these slogans and uses them during fight sequences, it produces comedic situations. The fifth robot in a series of military killing machines was struck by lightning during a training exercise, thus giving it emotions, taking away its monotone voice and giving it some semblance of sentience. He escapes the laboratory that created him and ends up at an animal lover's house. Johnny 5, as he now calls himself, has to put up a fight to not be taken back to the lab and reprogrammed. This proves to be difficult, since the other robots (who are all equipped with deadly lasers) are on the hunt for him. Luckily, some "Three Stooges" antics save Johnny 5 and bring him in contact with his creator, who finds love with the robot. This movie is kind of silly, but worth a watch for Johnny 5's impressions (like John Wayne).

Batteries Not Included (1987)

"With the old, in with the new" is an all too common saying when it comes to real estate in the city. An apartment building with some unique tenants has been bought and is scheduled to be torn down so that an enormous skyscraper can take its place. The only salvation comes from some space alien robots. These robots take refuge in an equipment shed on the roof of the building. The robots are made from scrap metal (they even manage to make a runt). The special ability of these robots is rebuilding things, and the apartment is trashed in an attempt by the corporation to get the tenants to leave. Eventually, the corporation has to shut down production for this film, which means this movie is a must see for die-hard fans of his work.

007)

s into a Ra Ra Riot

st upbeat numbers. After playing through about three songs, they finally stopped to introduce themselves and then continued to play on through their set.

the entire six-member band fit on stage and did not injure each other during the course of the night.

Ra Ra Riot is still a fairly new band on the indie-pop music scene, and this was evident in their choice of set list. While most

re'll save you the trouble of going to the trouble of going off stage then coming back on again."

bands could go back years into their repertoire, Ra Ra Riot only has a new EP and a newly released album of material. This fact, however,

did not hamper the group as they played through almost every song they have released. Some of the highlights included a stunning rendition of "Winter '05," "Dying Is Fine,"

"Ghost Under Rocks," and my personal favorite "Too Too Too Fast" (which was performed with a good mix of synthesizer). Their recordings really do

not do them justice, because the heavy hitting dance-beat drumming was really more prominent during their live set.

As their set came to a close, the crowd would not stop cheering.

"Alright, we'll save you the trouble of going off stage then coming back on again," said singer Wes Miles. After a quick encore the night was over.



PHOTOS TIM WEILERT / OREDIGGER

Music Reviews

Make Some Noise.

Krystal Meyers

Ben Johnson
Staff Writer

In 2005, at the age of 16, Krystal Meyers released a self-titled debut album that combined rock music with some acoustic flavoring. A year later she released *Dying for a Heart*, which had a much harder rock feel to it but also had many memorable anthems. Most recently, in 2008, Meyers released *Make Some Noise*, a record that created quite a stir on the pop/dance scene. Essential Records, under the production of Dubledutch (Mat Kearney, Toby Mac), has found a very talented young artist, who began shaking up things up when *Make Some Noise* debuted at #20 on the Billboard Heatseekers chart.

Favorite Song

There is a tie between "Make Some Noise" and "My Freedom" for the best song on this album. The title track is widely popular and is a superbly catchy tune. It has been used to promote the 2008 Olympic Games, as well as the fall lineups for both ABC and NBC. By calling the youth to rise up and make their voice heard and employing a fast and in-your-face beat, it is a tune that is hard to ignore. "My Freedom" is the only true ballad on album which serves to set it apart from

the other songs. The change of pace can be felt immediately as the piano sets a beautiful backdrop for Meyers's heavenly voice.

Forgettable Song

"Up to You" is slightly slower than most of the record, but is not nearly as captivating as "My Freedom." Some of the vocals seem a little strained at times and the tune falls between the cracks of the highlight tracks of the album. This puts the song in a bad place, because most of the album comes across as stronger than "Up to You."

In Closing

A huge shift in style appears to have suited Krystal Meyers well, proving that she is a versatile artist with a large fan base and a voice that grabs attention. Is she better at rock or the pop/dance genre? That question is nearly impossible to answer, simply leaving judgment to a matter of taste. This album is a vibrant and interesting addition to the collection of albums released by this ever-popular 20-year old. The future is full of promise for Meyers and fans will undoubtedly be eagerly awaiting her next album.

Save Me From Myself.

Brian "Head" Welch

Stephen Bartels
Staff Writer

Brian "Head" Welch has come out with a smashing debut album, *Save Me From Myself*. This album, which shares its title with his best-selling memoir, is lyrically, vocally and melodically excellent.

Head broke off from the metal band Korn in 2005 after hearing his daughter repeat the explicit lyrics of his band's song "A.D.I.D.A.S." Realizing that he needed a change, Welch decided to release his first Christian album. He drew on his experience in the metal genre and began addressing the problems he had faced in the past.

Head attacks many subjects from his past life with his lyrics. Heavy metal sounds, coupled with a positive message, places Head's album with other bands such as Demon Hunter and Haste the Day. The hit single off of *Save Me From Myself* is "Flush." He addresses the mistakes made during his old lifestyle: "All the puke I'm throwing up! in the toilet this sucks! Not a part of growing up! only spoils it/ life is boring/ same old story/ get drunk, throw up, sleep all day/ I am something/ I'm not nothing/ I can't let myself decay." The subject of idolizing wealth is the focus of "Money." On the final track, "Washed By Blood," Welch talks about giving his life to God, and he talks about a need for God in his song, "Adonai."

Vocally the record resembles Korn, but has calmer, deeper singing mixed well with guttural screaming throughout all the songs. Though he is not originally a singer, and does not quite have the quality of Korn, Welch shows a surprising amount of talent, depth, and variety. A good example is the title track. He starts slow and

calm, then picks up the beat and distorts his voice in mild screaming that continues into the chorus. Later in the song, there is a well built bridge which features a screaming sequence.

Instrumentally the album is innovative. A prime example would be the song "Re-bel." It starts with a choir of children, which is used throughout the song. The context of the choir is really meant to make a point, because he uses the children to emphasize the subject of kids growing up in abusive households.

The guitar parts throughout the songs are also rather unique in sound and variety. The intros for the songs vary from light guitar with a few strings to just a blast of guitar and drums. Voice-overs are also used to achieve interesting effects. On the last song ("Washed By Blood"), simple violin strokes and a slow beginning eventually lead into a steady beat.

Finally, Welch employs a questionable tactic with regards to the length of his songs. The average song length is six minutes, although most bands avoid this because it hampers radio playability. A variety of lengths appear on the record, from the radio single "Flush" (4:26), to the longest song, "Washed by Blood" (9:34).

This is an awesome CD, recommended for any metal head. However, it is still a good album for those who prefer softer music.

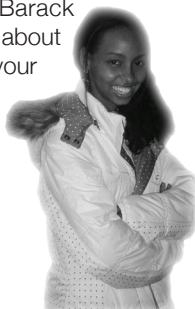


Minds at Mines

Roby Brost, Staff Writer

Just over 4000 students and faculty call Colorado School of the Mines home, a place where they study, work and live. Last Tuesday, the Mines community welcomed over 2000 additional guests, and their automobiles, to the beautiful campus. Hundreds thronged outside Lockridge Arena to hear Democratic Presidential Nominee Barack Obama speak. The local media had plenty to say about Mines as the campaign's choice of venue. What did your fellow students have to say?

"People actually care he came? I didn't."
Mahilet Hailemichael



"I thought that he made a big statement by coming to Mines. Out of every place he could go, he came to Mines. To me, that says that the campaign believes engineering is the future... I didn't get a ticket, but I went to Bunker Hall. The mentality at Bunker was different than at the Student center. You could hear everyone cheering at the Center, but at Bunker, everyone was a little less excited. Somehow I felt that the attitude at Bunker was a lot more cynical."

Katie Mills

"It puts us on the map. I could have wished that they had more tickets for students. I would have really liked to see him speak. We couldn't even go to the raffle because we were studying for the Physics II test."

Kristine Lombardi and Alexandra Morales



"Of course, a parking inconvenience was unavoidable. I don't really see the point of bringing him here other than it probably brought a lot of money to the school."

Andy Suderman

"I thought that it was awesome that it brought a lot of attention to Mines. It was quieter at Bunker than it was here... people would clap for certain things, but mostly they were just watching. I think it was interesting because Obama wasn't actually there, so people were really listening too."

Joe Zeimen



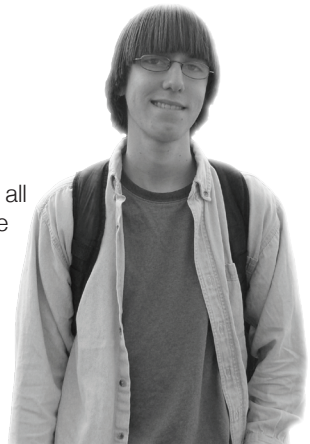
"I thought that it was really weird finding out what people really thought about Obama as a candidate. I thought that at Mines people would be so happy to have the Democratic Presidential candidate here on campus, but I was surprised by the number of people who were for 'NObarama'... the spray painted cars and the signs surprised me."

Rochelle Collins



"Well, it was a minor annoyance to have all the security around. But it was great to have someone who makes, or has the potential to make, such important decisions on our campus. He brought some good attention to campus."

Matthew Fakler



ALL PHOTOS ROBY BROST/OREDIGGER

Principally *Irked* Will the real John McCain please stand up?

Andrew Aschenbrenner
Opinion Columnist

There are six weeks left in what seems now like the longest possible presidential campaign that could ever happen.

The challenge that the American voter has is a huge one, albeit not as difficult as before the existence of the Internet. The average voter has to remove the media smokescreen and find what the candidates are really about. For the presidential race, the difficulty presented by the disconnect of the office-seekers is mitigated by the overwhelming glut of information.

To sort through it all would be an enormous task and should be performed by the media, but, as I've said before, the news organizations are more interested in the glittery issue of the day. So, use the Internet. There is plenty out there to show you what you need, or want, to see.

It has been argued that we are fighting the stereotypes and issues of the past, and we are. When John McCain presents himself and Sarah Palin as mavericks, I have to chuckle a little bit. It's preposterous to make that claim. In video footage from an interview with the Fox News Channel on May 22, 2003, McCain said there was a study that showed he "voted with the President over 90% of the time, higher than a lot of my Republican colleagues."

It's probably a bit hard to win the votes of those who are informed when a simple YouTube search reveals clips of McCain contradicting himself and his policies. When all else fails, do you trust a man who lies? I think there is substantial evidence that the "Straight-Talk Express" is now the "Double-Talk Express."

I was ineligible to vote in 2000, as I was only 13. As young as I was, I had an interest in politics and followed the Republican primaries. I was impressed with John McCain. I thought he represented something different, particularly in contrast with George W. Bush, then-governor of Texas.

After Karl Rove and the Bush campaign tore McCain apart with false accusations and slander in the South Carolina primary, McCain dropped out. Bush went on to win the election with a misleading and dishonest campaign. Still, as a relatively uninformed member of the population, I would have voted for Bush over Al Gore. Why? At the time, I liked his persona better.

If this was the year 2000, this race might look very different. But this is not the year 2000. The John McCain of 'now' and the John McCain of 2000 are two distinct men. Who is the real John McCain? What does John McCain genuinely believe in?

Since 2000, he has contradicted himself on the issue of Social Security

privatization. He has flip-flopped on offshore drilling and the new GI Bill. He has changed positions on torture, the Bush tax cuts, and the use of ethanol as an alternative fuel. He said in 1999 that he would not support the repeal of Roe v. Wade, the Supreme Court decision that legalized abortion. Now, his campaign says the decision must be overturned.

McCain has presided over a campaign that has lied repeatedly. They have lied about earmarks. They have lied about the "Bridge to Nowhere." They have lied about Barack Obama calling vice presidential nominee Sarah Palin a pig. In the words of New York Times columnist Paul Krugman, they keep "making assertions that anyone with an Internet connection can disprove in a minute."

Doesn't McCain know that he's being recorded every time he talks? Doesn't he know about YouTube, factcheck.org, and the rest of the Internet? Doesn't John McCain know what reality is? It kind of reminds me of another politician who seems to be firmly rooted in fantasyland: George W. Bush.

The best evidence for the identity of a man is the man himself. His words are a big part of that evidence. At best, he doesn't know who he is. At worst, he is taking you for a ride on the double-talk express. Don't go along. Be informed.

Political "Real Speak"

The Oredigger talks economics

Matthew Pusard
Content Manager

Over the past week, the economy decided to implode under the weight of the sub-prime mortgage crisis. Lehman Brothers underwent the largest bankruptcy in history (with over \$613 billion in debt), Bank of America bought the failing Merrill Lynch, and AIG received an \$85 billion federal bailout. Wall Street had a tumultuous week, with the DOW Jones plummeting 500 points to start the week and gaining 400 at the end. Understandably, people are anxious about the future of the economy. Here is what our presidential nominees are saying regarding the economy.

McCain/Palin:
Partially True-McCain's economic advisor was "the architect of some of the deregulation in Washington that helped cause the mess on Wall Street."

Former McCain economic advisor Phil Gramm was a cosponsor on the Commodity Futures Modernization Act of 2000¹ which cut back on regulation. The bill contained the "Enron Loophole"² which, according to MSNBC³, limits the oversight

1 <http://thomas.loc.gov/cgi-bin/bdquery/z?d106:s.03283>:

2 <http://blogs.abcnews.com/political-radar/2008/05/congress-seeks.html>

3 <http://firstread.msnbc.msn.com/archive/2008/06/22/1161113.aspx>

of the Commodity Futures Trading Commission on oil futures prices. The bill has also been receiving flak for deregulating credit default swaps⁴, which helped bring down AIG⁵.

But a few things do not mesh with that "architect" statement. Gramm was one of five cosponsors and the bill had to be signed into law by Bill Clinton. Additionally, Gramm is no longer with the McCain campaign. He stepped down after infamously referring to America as "a nation of whiners" in July⁶.

True-John McCain said, "The fundamentals of our economy are strong"

According to CBS⁷, McCain said it, without putting it into context. Later on, McCain explained, "My opponents may disagree, but those fundamentals, the American worker and their innovation, their entrepreneurship, the small business, those are the fundamentals of America and I think they're strong."

4 <http://www.politifact.com/truth-o-meter/statements/725/>

5 http://news.yahoo.com/s/ibd/20080917/bs_ibd_ibd/20080917general

6 <http://www.fox-news.com/wires/2008Jul10/0,4670,CandidatesGramm,00.html>

7 <http://www.cbsnews.com/blogs/2008/09/15/politics/fromtheroad/entry4450366.shtml>

Obama/Biden:
False-Obama was critical in the passing of the stimulus package in January

When Obama came to Mines on Monday, he claimed, "I outlined a plan to help revive our faltering economy, which formed the basis for a bipartisan stimulus package that passed the Congress."⁸ But Obama was not that important to the process. According to the Washington Post⁹, Nancy Pelosi and Harry Reid were the main players in the final bill and Obama was not even present for the final vote on the bill.

True-Obama received larger contributions from Fannie Mae and Freddie Mac than most senators

Obama's campaign has received \$126,349 from the employees of the two mortgage companies, less than only Sen. Chris Dodd (D-CT)¹⁰. Former Fannie Mae CEO Jim Johnson was also on Obama's VP vetting committee briefly before resigning. But McCain's committees have also received \$116,000 from lobbyists and board members associated with the two companies.

8 <http://blogs.abcnews.com/political-punch/2008/09/obama-inflates.html>

9 <http://www.washingtonpost.com/wp-dyn/content/article/2008/09/17/AR2008091703585.html?nav=hcmodule>

10 <http://www.politifact.com/truth-o-meter/statements/727/>

Candidates differ on specifics of US energy policy

Anant Pradhan
Staff Writer

Nearly 40% of the current energy production in the United States originates from petroleum, a resource which many analysts expect to peak within 15 to 25 years. Alternatively, 23% of U.S. energy is produced through coal, while non-fossil fuels produce a mere 15%.

Coal, however, may be the United States' biggest energy asset, with enough coal reserves available to sustain current energy demands for almost 250 years. It is surprising then, that a greater shift has not occurred towards the use of this resource.

Of course, one of the greatest fears of increased coal usage in the United States is the looming threat of a global warming catastrophe. With recent technological advancements in carbon sequestration technology, coal supporters hope to address those concerns.

Many other alternatives exist, including the increased use of nuclear power plants, wind and solar energy, and even geothermal energy. France has successfully and extensively used nuclear power for many years, but at a price tag of almost \$10 billion per plant, few companies are willing to build one without significant government subsidy.

Other renewable energy developments will also go a long way towards "greening" our country, but as of yet, the technology doesn't exist for any of these alternatives to fully replace the nearly 85% of energy produced by fossil fuels.

With the approaching energy shortage and the ever-increasing energy consumption of Americans, the next President must have an effective energy plan in place.

There are many topics on which presidential candidates Senator Barack Obama and Senator John McCain agree for such a plan. Both plans commit funding to the development of clean coal technologies and also the development of a cap and trade system for greenhouse gas emissions.

They agree that expansion of domestic oil production is necessary, but Obama does not support offshore oil drilling while McCain does. Specifically, Obama supports drilling on current reserves and also supports the development of the Alaskan Oil Pipeline.

In order to curb petroleum consumption, Obama has proposed tax cuts for individuals who purchase hybrid vehicles, with the goal of putting 1 million hybrid vehicles on the road by 2015.

Through the proposal of a \$300 million prize, McCain hopes the ingenuity of Americans may lead to the development of com-

mercially viable battery technology for fully electric automobiles. He focuses his efforts, however, towards the development and usage of flex-fuel vehicles capable of running on ethanol.

While both intend to increase energy efficiency, the candidates plan on accomplishing this goal in very different ways. McCain plans to increase the electric efficiency of the federal government, the largest electricity consumer in the world, and to upgrade the national grid.

Obama, on the other hand, proposes to decrease electrical demand by 15%, but does not indicate how he plans to achieve this. He further proposes to weatherize one million low-income homes annually.

McCain indicates that he plans on encouraging the market for alternative energy production such as wind and solar power, but Obama goes so far as to state that 10% of electricity will come from renewable sources within four years. Again, Obama does not state how he will achieve this goal.

The biggest difference between the two policies concerns nuclear power. McCain has proposed the construction of 45 new nuclear power plants by 2030 with the goal of eventually constructing 100 plants.

Obama, however, makes no mention of nuclear power on his website, and, in response to questions on the issue, simply does not rule it out. He appears to have no plan for extensive use of the technology.

With regard to energy policy, two things instantly become clear when evaluating the two plans. John McCain has a much clearer idea of how he plans on developing the energy to deal with the increasing energy demands of our country.

He states exactly how he plans to accomplish goals and also indicates how he will invest in the various technologies. Obama, on the other hand, remains very vague about his policy. While he sets ambitious goals, he avoids stating exactly how he plans on accomplishing those goals.

Second, John McCain intends to utilize the entire spectrum of energy technology while Barack Obama clearly avoids the use of nuclear power. With the increased viability and the reduction in waste by fourth-generation nuclear reactors, it seems naive not to invest more resources into the development of this form of power.

In the end, the two energy policies are very similar. However, while I'm all for supporting ideals, when it comes to energy policy I want a concrete plan. John McCain offers this strategy and plans to utilize a very necessary energy technology, which makes his plan superior.

Green water practices

Amanda Rock
Staff Writer

Green energy. Green homes. Green *living*. We're all hearing about the global trend to 'recycle and reuse,' and Americans recycle tons of things every day: plastic bottles, newspapers, magazines and clothes.

But have you thought about your water? In 2007, Coloradans used almost 17 million acre-feet of water (an acre-foot is the water needed to flood 1 acre of land 1 foot deep) for commercial, domestic, agricultural and other uses. Consider your water

uses on a daily basis: you take a shower every morning or night, throw a load of clothes in the washing machine, run the dishwasher, cook, use the toilet, brush your teeth, and wash your hands, among other things. That adds up to more than 100 gallons of water per day – for *one person*.

Did you know that 65% of that water, called greywater, can be reused for things like watering your lawn? Greywater is the leftover water from activities like showering, washing clothes and dishes and brushing

your teeth. This 'waste water' can be filtered and reused, easing up on your water bill and helping you remain environmentally responsible in the dry conditions of our semi-arid environment. Unfortunately, the Colorado Department of Public Health and Safety does not differentiate between reusable greywater and blackwater, the waste water flushed down the toilet or contaminated with toxic chemicals. That means that greywater recycling is not permitted in Colorado.

There are some water quality issues surrounding greywater use in general. First, greywater released at

the surface must be treated and filtered before use. If greywater is discharged under the

surface but shallow enough to reach roots, typically 18 to 24 inches, the area and greywater filtration system must be monitored on a regular basis and you must have a permit from your local health department. Discharging greywater beneath the root level also requires a permit from the local health department. Greywater should not be used on plants you plan on eating, and blackwater should definitely not be recycled.

If you are interested in recycling water without the hassle of building and installing a filtration system for greywater, another option is rainwater retrieval. Basically, stick a bucket under your downspout and use the water you collect to water plants and your lawn and wash your pet or car. Rainwater recycling is inexpensive and easy; it's a good way to be environmentally responsible without a lot of effort.

There are a lot of ways to conserve water and keep your water bill low. For instance, wait to wash your dishes until the dishwasher is full and wait to wash your clothes until you have a full load of laundry, which can save you 300 to 800 gallons of water per month. Keeping a pitcher of water in the refrigerator instead of running the faucet until the water is cold and catching water running down the drain while you wait for it to get hot can save up to 1,200 gallons of water per month. Take shorter showers, which can save you up to 700 gallons a month. Watering your lawn less often can save 750 to 1,500 gallons a month. Maintaining your home, which means fixing leaky faucets and plumbing, can save 20 gallons a day. Be responsible and conserve your water, whether you want to invest in a greywater filtration system or just shut off the faucet while you are brushing your teeth.

Letters to the Editor

"Obama's Inconvenient Truth" Do you agree with Obama or McCain on abortion? Your values should determine how you vote. McCain believes abortion should only be legal in the cases of rape, incest and when the life of the mother is endangered. McCain opposes partial-birth abortion and federal funding of abortions. (www.ontheissues.org/Senate/John_McCain_Abortion.htm) In The Case for Pro-Life Democrats at www.democratsforlife.org, a pro-life plank was proposed for the Democrat Party platform. Yet, there is no pro-life plank because Barack Obama is an abortion purist. The inconvenient truth is that Obama disagrees with Biden, Clinton, Kennedy, McCain and all US senators. In 2002, the US Congress passed the Born-Alive Infants Protection Act without one dissenting vote in the house or senate. The bill was designed to provide legal protection for babies born alive during an abortion. In similar legislation in Illinois, Obama voted against protecting aborted babies born alive -- three times. (google: "obama, abortion, lowry"; or "jill stanek") In 2007, Obama told the Planned Parenthood Action Fund that the Freedom of Choice Act would be the first legislation that he would sign as president. The act would not only codify Roe v. Wade, but wipe out all current federal, state and local restrictions on abortion that pass muster under Roe, including the Hyde Amendment prohibiting federal funding of abortion. Obama opposed the partial-birth bill that passed the House and the Senate, 281-142 and 64-34 respectively, and has criticized the Supreme Court for upholding the law. Is Obama's record on abortion the kind of change you can believe in?

Roger Ballenger

I'd like to mention a few things in regards to Bill Everson's article, Conservative Reflections. I had to read the first part of his article twice just to make sure I had understood Mr. Everson correctly because the short-sightedness displayed in it is rather frightening.

In the same breath that Mr. Everson relates the extremes of military and community service (which are tenuous conclusions at best), he neglects to mention the potential outcomes of extreme self-interest. Honestly, likening promotion of serving one's country to militarism is ludicrous and the same goes with community service to communism. In fact, history shows that the complete opposite is true: individuals that gained power and used it for self-interests (self first like he advocates) are commonly referred to as ?dictators?; perhaps he has heard of a few of them. Maybe extremist examples aren't as great as people would like to think.

What's really scary to me is that Mr. Everson assumes that strong economic principles translate directly to politics. Yes, I am responsible for my own economic success or demise once I am out from under my parent's (or guardian's) wings. How this principle of self-interest translates to community service or government service being a negative thing on a national level is ludicrous. Mr. Everson wrote: ?Service through national programs results in reliance and eventually dependence on the program by volunteers and benefactors alike.? Thats the point. There's an amazing organization called the American Red Cross, and others like it, that would not exist without the support of millions of volunteers and charitable donation. He then states: ?Additionally, the service these programs offer is usually based on bureaucratic greed-not communal need.? I'm not exactly sure how supplying blood to thousands of hospitals for life-saving transfusions is bureaucratic greed, but hey, maybe I'm not self-serving (or cynical) enough.

Fact is, the reality of keeping one's financial interests a high priority is important indeed, and I'm sure many if not most people would agree. However, I would find it incredibly ironic if Mr. Everson should someday need something provided by a charitable, volunteer driven organization ? disaster relief, blood transfusions, etc.

The second part of Mr. Everson's reflections is perhaps even more ludicrous than the first. While he uses the current story of Senator Obama as the example, the underlying message of the article is that the media is biased. Is this really even that surprising? What gets me the most is the same hypocrisy Mr. Everson displays in the first part of his article, he shows in the second. If Mr. Everson really believes that there is no conservatively biased media, perhaps he hasn't heard of Fox News. Mr. Everson, calling someone out for having their hand in the cookie jar doesn't work so well when yours is already in it.

I will try not to get too deep into politics, but it's really amazing that McCain's campaign pegged Obama as being inexperienced and in the same stroke picked Palin as running mate. I'm not sure about you, but I think the media scrutiny, while very likely biased, is legitimate in that regard. When so little is known about a potential Vice-President (and possibly future president), I'm amazed that you expect positive news coverage over this choice. I mean, really, this person could potentially be our next president and hundreds of millions across America had never really heard of her ? any skeletons in her closet were bound to surface. I'm not sure how this should come of any surprise to him, but if Mr. Everson really believes that all media is liberal, I think it's time for him to shed that naiveté.

Regards,
Jeff Park

Football brains and brawn yield victory

Keegan Hammond
Staff Writer

With an overall record of 7-5 last season and an impressive average 2.8 GPA, the Orediggers football team is well on its way to yet another winning season both on and off the field. The roster shows 17 out of 22 returning starters and, only three weeks into regular season play, CSM already has the bragging right of having two players named Rocky Mountain Athletic Conference Players of the Week. After last Saturday's 35-28 victory over Western New Mexico, Adam Saur, a junior majoring in civil engineering, was named the RMAC Offensive Player of the Week. Saur, at 6'3" and 190 pounds, is a wide receiver that teams fear; he leads CSM in receptions (21), receiving yards (247) and receiving touchdowns (5). He averages over 82 receiving yards per game. In addition to this win, the Orediggers celebrated a 37-17 blowout victory against Fort Hays State on Sept 6. Linebacker Nick Haniszewski, also a junior majoring in civil engineering, was named the RMAC Defensive Player of the Week following his performance in the game. Defensive captain, Drew Ferren (6'3" / 205 lbs), a senior majoring in environmental engineering, said, "It is nice we have a couple players getting recognized. It has been all 3 phases (defense, offense, special teams) that have helped us in the last games though. Positive team attitude is our coaches' philosophy."

Quarterback David Pesek, a junior in electrical engineering, commented on last week's game; "[Saur] had a great game hauling in 3 touchdown receptions, Tom Kastens added one more reception, while JT Baum had a rushing touchdown. Our first win at home this season against Fort Hays was a huge win for the team since it gave us momentum [going] into past Saturday's game."

Two freshmen, Colin Baker, punter (6'2" / 180 lbs), and Brain Harclerode, petroleum engineering major and kicker (6'0" / 155 lbs), have made their debut for the Orediggers special teams. With 27 freshman players on scholarships and 25 walk-ons this year, Head Coach Bob Stitt says that the depth of these freshmen goes far beyond just these two mentioned players. However, the rest will be

red-shirted because of the tremendous talent and experience of the returning players. Red shirt freshmen earn valuable practice experience while also being able to prolong their college eligibility with an extra season. These freshmen are willing to sit out during games in their first season because of the winning record, reputation, and strong academics known to Orediggers athletics. Ferren said of his red-shirt year, "It is such a huge transition from high school to college; red-shirt year prepares you. I know my freshman year, I wasn't ready to play."

Pesek looked forward to facing Fort Lewis Saturday September 20th. He said, "The defense will be put to test by Ft. Lewis' spread offense, but Coach Benson is preparing our guys really well. We are taking each week one at a time and not overlooking any opponent. We need to take care of business this Saturday, in all facets of the game, and then come home Sunday and start preparing to do it all over again."

Stitt reported that he was "impressed with both games and how many students have come out. It really is a great social aspect for the students. The first game the fans were great, I think as we continue to win the fans will keep coming out. I also think the cheerleaders did a great job keeping the excitement up."

On September 20th, the team traveled to Fort Lewis in Durango, and won, 30-9. The next home game will be Saturday September 27th versus Colorado State University - Pueblo and the team hopes to see everyone there at the noon kickoff.

Injury update: Donald Markley, Wide Receiver (5'11" / 175 lbs) majoring in petroleum engineering, should be back within a couple weeks from a shoulder injury.

Stats courtesy of Rocky Mountain Athletic Conference and CSM Football Roster.

The Orediggers football team is well on its way to yet another winning season both on and off the field

Red shirt freshmen earn valuable practice experience while also being able to prolong their college eligibility with an extra season

Mines volleyball aims to ace this season

Sarah Lustgraaf
Staff Writer

Typically in the sporting world, a season in which a team lacks experience is known as a "rebuilding" season. This is not the case for the Colorado School of Mines volleyball team. With no seniors on the team and only three eligible juniors, Mines has started the season stronger than the last, opening with three straight wins in the Oredigger Classic. The team is now 2-2 in conference play and an overall record of 7-6 with three more wins than at this point in last year's season.

The winning record can be attributed to a variety of additions that have occurred this season. This is the first season as head coach for Jamie Skadeland, who spent the 2007 season as assistant coach under Shelly Johnson. Skadeland was an assistant coach at Minnesota State University before joining the Mines staff. Skadeland's head coaching presence has had a positive impact on the team. "She's more positive and knowledgeable about

the game," said sophomore Kirstie Bunting.

Skadeland has also introduced a jump training program for this season entitled CSM jump. As with any conditioning program, it is not looked forward to by the players, but they have noticed its effects in competition. Freshman Amanda Massey said, "It's definitely not much fun. But, you can see the difference in games, especially when it gets down to the fifth game and you can tell that we're in better shape than our opponent."

The program is a combination of plyometrics designed to increase the player's verticals. The team typically does the 45 minute program twice a week. "No other team does CSM jump," said sophomore Gianna Ricotta, "it gives us an advantage."

Team chemistry is also an advantage for Mines. "The team is much closer this year," said sophomore Candice Magnusson, "it feels like a natural team." Bunting agreed, "It seems like everyone is committed." But as with any season there are some struggles. Over the course of the season the team has developed the habit of letting their competition even the score in the latter part of the game. "Our biggest challenge

is finishing. The last five points of the game we always get tense," said Bunting.

In order to meet the team's goal of making post conference play, Mines is working to remedy this dilemma. "We just need to stay positive and disciplined," said Bunting. "We're working on focusing on every single point, one at a time," added freshman Amanda Bauer.

As a whole, the team believes that they will have a more successful season than last year. This was evident in their latest game against Nebraska-Kearney, a conference powerhouse who took the RMAC championship last season. Mines put up a fight against the talented Kearney before falling in three games.

"Attitude is the difference," said assistant coach Alex Schilling. "The team is more positive and working harder together. They have the talent; they just need to put it all out on the floor." Mines hopes that the changes that have been made this season will make a difference as conference play continues and the fight for the RMAC postseason wages on. The next volleyball match will occur at 7 pm on September 26th vs. Colorado Springs.

"The team is more positive and working harder together. They have the talent; they just need to put it all out on the floor."



Young bombers: Mines men's golf team

Elise Goggin
Staff Writer

The men's golf team is subtly becoming the team to watch for in the athletic community at Mines. With a roster dominated by freshmen who can hit the ball a mile, a new coach with an impressive resume, and a technologically advanced training program, the golfers of CSM are making a name for themselves. Two weeks ago, freshman Jim Knous led his team by individually winning the 2008 Colorado Mines / Regis University Fall Invitational. Knous's three-round stroke total of 207, combined with the excellent play of his teammates, put Mines on top and gave them their first 1st place finish in the program's history. Knous was awarded with the RMAC Men's Golfer of the Week for his performance, the only one under par for the tournament, and the team as a whole finished ahead by seven strokes, which is an amazing accomplishment.

Last week, the men competed in the first RMAC head-to-head at the Heritage Golf Course at Westmoor where they placed 7th. Coach Tyler Kimble wasn't disappointed by his team's performance because he said, "The course just wasn't suited for us. We have a bunch of young bombers that can hit it a country mile and this course is really tight." Individual standouts in this tournament were Jim Knous, who tied

for 6th, and sophomore captain, Sean Hovelkamp, who placed 16th overall.

This week the men travel to Kearney, Nebraska where they hope to do well. "We are going to get to play on a course that really suits our style. It is wide open, and I foresee us doing much better there," says Coach Kimble.

So what is so special about this team? Out of the 12 guys on the team, eight of them are freshmen. This could be a handicap due to inexperience on the team, but when Coach Kimble was questioned about this, his response was just the opposite. He said, "It's great! We have a great leader in Sean, who is a sophomore on the golf team, but technically only a freshman at Mines. He lives in the dorms with the other eight freshmen, and they do everything together. They eat together, hang out together and play golf together." And as for the level of inexperience, the results so far seem to tell another story.

If loads of talent and team camaraderie aren't enough, this year's team also boasts a brand new team room with state of the art swing analysis software, a putting green, recliners and a

big screen TV. Seen in the accompanying photo is freshman Bobby McCracken next to Tiger Woods. This layout is one of the options available to help improve the swing of the golfers. The line indicates the preferred path of the club, and by stepping through the film in slow motion they can even compare their swing to the pros like Tiger. This setup is fairly common for Division I golf powerhouses, but Kimble believes that Mines might be the first Division II school to have these kind of resources.

The CSM athletic department has made an effort to increase the funding for the golf program in the last couple of years, and it looks like they are getting great returns. Be sure to keep an eye on the men's golf team this year and in the near future, because they are young and they are looking good.



ELISE GOGGIN/OREDIGGER
Pro golfer? Bobby McCracken compares form with Tiger Woods

Fool's Gold

"Smooth as an old man's bottom"



Coors announces Clear Creek beer float Free Beer!!!!!!!

Mike Stone
Alcoholic

On September 16, the Coors Brewing Company announced plans for the first annual Clear Creek Beer Float. Over 50,000 cans of Rocky Mountain fresh Coors Light will be released into Clear Creek up in the mountains this Saturday. With the flow of the river, the cans will chill and float downstream to over 4,000 residents of Golden as they line the banks of Kayak park.

In celebration of Coors's use of Rocky Mountain water, the Beer Float will be a reminder not to pee in the creek. Mines students are already lining the creek to get a front row seat.

Senior Emily Liston has been sitting in the creek on a lawn chair for a full 24 hours so far. "I've heard the story. I just can't believe it is true. It sounds so beautiful, so, I have to see it for myself," she explained. "I just call Dominoes twice

a day and they deliver anywhere! I'll be here all week."

Seniors Victor and Vince Mazarella have big plans for the float. "We constructed a large net, extraction device. It takes up anything that floats down the river (including dolphins) and drops it into a large tank," revealed Vince.

"From the tank, cans are automatically crushed and the beer leads to another tank, which leads to an IV. We'll simply crank it with our legs as we intravenously get super smashed brothers," mumbled Victor. The duo is planning on passing out on a large replica of a double-mint gum package.

Golden Mayor, Jacob Smith says the beer float will attract tourism. "Everyone knows beer doesn't grow on trees, but it does grow in Clear Creek! Everyone will flock to Golden as soon as they hear, especially those Boulder alchies."

The beers will be dropped into Clear Creek at exactly 8am on Saturday, September 27, and the largest under-age binge in history will begin at 8:01. Let's go fishing!

Intergalactic Council to come to Mines

Janeen Neri
Cultural Attaché

This Thursday, the campus will be welcoming its most famous guests yet – the Intergalactic Council. After several weeks of discussion, the Council decided on CSM because they "realized that it had the proper filibustering flux matrix," said Blamm Kerpow, a representative for the Trimbo homeworld; "When we asked humans to 'take us to your political folk', they all pointed toward [Golden] for some reason I still can't quite figure out."

The 5,000 member council has never convened on Earth before. "This really shows how our school's prestige in the universe has grown since we began our program on extracting Klipman-carbide ores," said CSM President Bill Scoggins. "What a fantastic opportunity!" The president of CU Boulder was unavailable for comment.

Though it will certainly put Mines in the spotlight, some are wary of the event. "Can you believe the

crowds this'll make?" asked freshman Joe Bowman, adding that Senator Barack Obama's visit last week "was bad enough; [I] could barely make it to class around that giant line. I don't want to see the crowds an Intergalacti-blah-blah-blah will make." There are also fears that the intramural fields will burn when the Council's shuttles fire their retrorockets to land. Still, most agree that the visit is worth it. "I can't tell you how long I've waited to see the Triptikk representative!" said junior Harold Merle, "I want to personally thank him for all the work he's done in blocking handouts to the B'ell'frie district."

There will be no tickets for the event, which is technically not open to the public. However, about 100 "citizen seats" will be available on a first come, first served basis; these are expected to fill at least 48 hours before the event. Additionally, the historic meeting will be broadcast on national television and through intergalactic brain wave transmitters.

Steamgate exposed Secrets of the tunnels

Cameron Frisby
Steamified Reporter

The latest scandal to hit the Mines campus emerged this past Tuesday from a simple game of urban capture the flag.

In this game each team launched an all out offensive to steal the opposition's flag, not letting buildings, walls, or vegetation stand in their way.

An exceptionally glory-hungry freshman, Andy Warren, grew tired of getting chased by the cops every time he tried to scale Hill Hall in search of the flag.

Always the over-enthusiastic Teenage Mutant Ninja Turtle fan, young Andy kicked open a sewer cover and dropped into the darkness.

Mr. Warren instantly regretted his choice as he simultaneously landed in a smelly pipe and twisted his ankle on a very grumpy sewer turtle.

Limping through a sewer tunnel might seem a little over the top for a simple game, but logic rarely limits the actions of all those driven by the spirit of the flag.

Trapped in the underworld of pipes, tunnels, and storm drains, Andy stumbled into a control room for the school's heating tunnels. What he saw next changed his life forever.

The young freshman had burst into a secret meeting of the Greek association. What they told him

changed his Mines career for good.

Back in the 80's the Golden police started cracking down on underage alcohol consumption. Faced with an uncertain future, the fraternities united in an effort to circumvent the legal issues facing their drinking games.

In the spring of 1982, Martin Hamm completed his Senior Design project by mapping the entire steam network that links the Coors brewery to campus.

A proud member of SAE, Martin proposed a bold idea to the united Greek association. By re-routing the tunnels to carry beer, the fraternities could create an untraceable, permanent supply of booze to power years of parties.

The only problem the Greeks have had with the system was with the introduction of Zima in 1993. All of the fraternities had a really hard time attracting new members that year as the tunnels brought the disgustingly fruity beverage to campus.

Back to our hero. Andy Warren struck a deal for the ages with all of the Greek representatives. He pledged to keep the secret of the tunnels as long as he was allowed into every party for the rest of his time at Mines.

The reason that this story has gotten out is that Andy graduated last spring and only just got around to telling me on Tuesday.

Stupid Andy.



COURTESY WIKIMEDIA
Mm, Zima. Introduced in 1993.

Sudoku

8				6			2	
		3	8			5	7	
	6		5	7		4		
		1	3	2				
6			7	4	1			2
				9	5	8		
		4		5	6		8	
	7	8			4	9		
	9			8				5

Puzzle by websudoku.com

solution

4	8	7	1	6	2	9	3	5
1	9	3	5	4	8	6	2	7
2	6	5	9	3	7	1	8	4
6	3	2	4	8	9	5	7	1
8	5	1	6	7	3	2	4	9
7	4	9	2	1	5	3	6	8
3	1	6	7	5	4	8	9	2
5	2	4	8	9	6	7	1	3
9	7	8	3	2	1	4	5	6

Puzzle by websudoku.com

Mines Improv Theater is scripted | Not off the cuff as originally thought

Benjamin M. Weilert
Founding Member

Every other Tuesday night at 8pm in Berthoud Hall, room 241, one of CSM's lesser-known groups meets. Mines Improv Theater (MIT), a spin-off group from Mines Little Theater, gets together and has a great time doing improvisational games. However, most of the mate-

rial used is pre-determined.

One of the games, called "Who's Line Is It Anyway?" requires audience members to write down phrases that are then used in a scene when the actors run out of ideas for dialogue. Many other games also require pre-planned characters and scenes in order to keep the actors in line. MIT is also infamous for reusing material from

previous meetings, which was at its worst during the writer's strike of 2007. "I swear, I've been Michael J. Fox at SeaWorld at least 7 times," says longtime member B. Weilert, who has asked that his first name be withheld.

Satire is usually the name of the game, and no subject or person is taboo. Some of the famous figures that have been portrayed at MIT

meetings are Michael Jackson, Barack Obama, George W. Bush, and Leonard Nimoy. "I'm Jesus!" proclaimed member P. Johnson as he threw rose petals from a strainer.

Despite many of the jokes being pre-planned, occasionally some good one-liners are produced. Such quotes include, "... and then she started talking about geosyn-

chronous orbit and I'm like: "Take off your pants", and "Your pelvis is moving so much the camera won't focus!" When all sources of material are depleted, members of the group resort to what is referred to as "Plan B."

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